

Abstract of the Disclosure

A unit pixel in a CMOS image sensor with a high sensitivity is employed by modifying a unit pixel circuit and a layout. The unit pixel in the CMOS image sensor includes: a photodiode; a transfer transistor disposed between the photodiode and a floating diffusion node, wherein a transfer control signal is applied to a gate; a reset transistor disposed between the photodiode and a VDD terminal, wherein a reset control signal is applied to a gate and a VDD is applied to a drain; a drive transistor of which a drain is connected to the VDD terminal and a gate is connected to the floating diffusion node; a selection transistor of which a drain is connected to a source of the drive transistor and a source is connected to an output terminal, wherein a selection control signal is applied to a gate; and a dummy transistor disposed between the drive transistor and the floating diffusion node, of which a gate is connected to the floating diffusion node.